



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Matt Petty, CDM Smith*

*Date: June 15, 2015*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on June 15, 2015. Monitoring is being conducted on a daily basis through completion of construction activities for the Oxford Retention Basin Multiuse Enhancement project. This monitoring is being conducted in compliance with the Streambed Alteration Agreement and Amendment issued by the California Department of Fish and Wildlife for the project.

## Methods

Biological monitoring was conducted by Matt Petty, CDM Smith biologist on June 15, 2015, beginning at 7:10 am and ending at 4:00 p.m. In accordance with the CDFW Streambed Alteration Agreement (Amendment 9, Section 2.32), the weather was checked to determine if rainfall in excess of the threshold (greater than 0.02 inch of rain, with 50% chance of rain or greater probability) was forecast. The forecast showed 0 percent chance of rain predicted for June 15, 2015. As stated in Amendment 9, "...if measurable rain...is predicted, all work activities shall cease and protective measures to prevent erosion/siltation shall be implemented/maintained."

An inactive killdeer nest is present in the mudflat area on the north shore of the Basin. The three young have fledged and the fourth, abandoned egg is no longer at the nest site. The killdeer no longer show site fidelity to the former active nest and wander the entirety of the Basin, with most activity along the north and south banks. When active, 300-foot buffers clearly marked with tape were placed around the nest. All work activities have thus far been prohibited within the 300-foot buffers, with the exception of removal of chain link fencing approximately 250 feet to the west and out of view from the killdeer nest. During the fence removal, the killdeer was not flushed from the nest.

During the daily monitoring on June 15, 2015, the biologist observed minor vegetation removal by hand associated with BMP installation, installation of BMPs (silt fence), and stringing of temporary power lines at the site. A crew of two workers conducted the vegetation removal and BMP installation, and were overseen by the contractor superintendent and the Inspector of Record. A

second crew of two from Power Plus worked on the temporary power lines.

The following sections provide the biologist's field log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

7:00 am. The biologist arrived at Oxford Basin (site) and prepared and organized field equipment for initial biological survey.

7:10 am. The biologist begins the initial biological survey. One black phoebe and one house finch, perched atop a temporary power pole, are observed in the southwest corner of the site. One black-chinned hummingbird is observed near the tide gates. One great egret and one snowy egret are fishing on the north mudflats of the central Basin. Two northern rough-winged swallows and several western gulls fly over the central Basin. One mourning dove is flushed from the south shore. Two American crows and five rock pigeons are observed near the high-rises along Admiralty Way. Five mallard, including two "Eclipse" males, are observed sleeping and foraging in the eastern Basin, where significant algae is accumulating. Along the southeast channel, one black-crowned night heron, two house finches and one American crow were observed. At the eastern fence, two dark-eyed juncos, five house finches, and two northern rough-winged swallows are observed in the trees along the bike path. One mallard and one immature black-crowned night heron are at the stormwater inlet. Nearby, one Anna's hummingbird is observed on the northeast corner fence. Three mourning doves and three house finches are observed along the north shore. One adult killdeer is observed on the northwest mudflats, and two adult killdeer are observed along the northeast peninsula, but no chicks are observed. No killdeer are at the nest site. The nest is examined and no eggs, eggshells, or evidence of recent activity is observed.

7:30 am. The construction contractor superintendent (superintendent) arrives at the construction trailer with a crew of two workers. Four barn swallows are observed along the northwest mudflats and one adult killdeer chases another off of the north mudflats. At 7:48 am, an osprey circles the western Basin and lands in the tall pine next to the tide gates. It flies off to the southwest at 7:57 am.

8:00 am. The biologist conducts Bio-awareness Training with the contractor crew. The biologist explained that no one should enter the killdeer nest buffer areas, which are clearly flagged, and to adhere to BMPs to prevent soil erosion into the Basin. The contractor crew signed the sign-in sheet indicating they understood and will follow BMPs and wildlife protection measures. The superintendent explained that the planned activities for the day included installation of silt fencing and stringing electric lines from temporary power poles (Power Plus).

The osprey returns to the pine at the tide gates. It perches in the pine until flying off to the south at 8:12 am. During its time in the pine, the osprey is harassed by a black-chinned hummingbird. One adult killdeer and three chicks are observed on the northwest mudflats, approximately 150 feet

west of the nest. A green heron is observed on the west shore, and three mallard fly over the Basin.

8:15 am. Minor vegetation clearing with shovels, associated with silt fence installation, begins on the south shore near the tide gates. The second adult killdeer joins the other parent and the young as a third adult killdeer and two American crows harass them on the northwest mudflats. The parents aggressively drive the killdeer and crows off the mudflats.

8:30 am. The biologist briefly meets with a group of four Beaches and Harbors, L.A. County, and consultant staff who had entered the site near the tide gates. They discussed the role of the biologist, wildlife sightings on-site, and the planned work for the day. The group leaves the site after approximately 10 minutes. No wildlife is in the vicinity of vegetation removal activities other than 3 mallard foraging on the water roughly 50 feet away. They are undisturbed.

9:00 am. Minor sea lavender removal for silt fence installation continues to the east along the south shore. The silt fence is to be installed above the pickleweed zone. Two gadwall land in the eastern Basin to join four foraging mallard. A snowy egret flies in and lands on the tide gates roughly 300 feet from the work area.

9:15 am. Silt fence installation begins at the tide gates. Two rock pigeons, two house finches, and one western gull fly over the work area. A great egret chases a snowy egret along the northern mudflats. Two barn swallows forage over the western Basin. Hundreds of small fish are observed congregating at both tide gates.

9:45 am. Minor vegetation removal and silt fence installation continues to the east along the south shore. The Inspector of Record arrives at the site. Twelve mallard forage in the eastern Basin, some coming to within 50 feet of the work area. The biologist observes that when the killdeer sense danger, the three chicks run under one of the adults who sits and shelters them as the other adult confronts the intruder. The biologist conducts a thorough investigation of the nest area to determine the fate of the fourth egg. There is no sign of the egg, egg shells, dead nestlings, or evidence of predation.

The biologist discovers a second, active killdeer nest with four eggs in a shallow depression approximately 8 feet southwest of the original nest. No adult killdeer are observed. A mourning dove is observed 8 feet west of the original killdeer nest and will not flush. It hides in the pickleweed and allows the biologist to come closer. It is suspected that the dove is on a nest.

10:15 am. Silt fence installation continues to the southeast channel. Two dark-eyed juncos and three American crows are observed in trees along the bike path. One black phoebe is observed at the pump house, and three house finches fly over the work area. Both adult killdeer and the three young forage around the construction trailer and walk around Parking Lot No. 8. They are approximately 500 feet west of the nest, and are showing no site fidelity to the inactive nest site. The biologist alerts the superintendent, who is about 10 feet away, and stresses caution moving

forward since the killdeer do not appear afraid of human activity.

10:45 am. Work temporarily stops on the south bank as the crew returns to the trailer to get additional silt fence materials. The biologist observes the second killdeer nest for 20 minutes. No incubation and no adult killdeer activity is observed. The biologist also flushes the mourning dove when he gets within five feet. The dove was incubating two white dove eggs on a flimsy ground nest of sticks and grasses hidden within pickleweed. The nest is 8 feet to the west of the recently inactive killdeer nest.

11:00 am. Silt fence installation on the south bank resumes. Algal coverage appears to be increasing as the day goes on. There is very little observed wildlife activity near the work area. House finches are calling from trees on the south side of Admiralty Way; waterfowl are sleeping on the north shore; and a northern mockingbird calls out from a light pole along Admiralty Way. There are infrequent American crow, swallow, and western gull flyovers.

11:50 am. The construction crew breaks for lunch. Two black-crowned night herons are observed in the southeast channel.

1:00 pm. The Power Plus crew arrives. The biologist conducts Bio-awareness Training for the two crew members. They sign the sign-in sheet agreeing to follow wildlife protection measures. The Power Plus work plan for the day includes stringing wire from the recently-installed poles. No new poles will be installed today. The construction contractor crew continues minor vegetation removal and silt fence installation along the southeast channel. The two killdeer parents and three chicks are foraging in the northwest mudflats, and two snowy egrets are observed (one at the tides gates and another in the southeast channel). Power Plus begins stringing wire along the west bank.

1:30 pm. To this point, no adult killdeer have been observed on the new nest, or within 75 feet of the nest. The mourning dove continues to sit on its nest. One double-crested cormorant is swimming in the eastern Basin, approximately 300 feet from the work area. Three house finches are observed near the pump house, and two American crows forage near the southeast channel gate. A third American crow and a rock pigeon fly over the work area.

2:00 pm. Silt fence installation stops along the southeast channel as the crew return to the trailer for more materials. The Power Plus crew finishes its work along the west bank and leaves the site. The adult killdeer and the three chicks are on the northern mudflats. The mourning dove continues to sit on its nest, with a second dove (likely its mate) perched on the utility wires above. Fresh raccoon tracks are observed on the northern mudflats.

2:30 pm. After moving personal vehicles to Parking Lot No. 7, the construction crew continues installing silt fence along the southeast channel. One black phoebe perches on debris roughly 75 feet from the work area. One American crow, two mourning doves, and one house finch are at the pump house. Several house sparrows are heard calling back and forth in Yvonne Burke Park to the

southeast of the project site. Two rock pigeons and two western gulls fly over the work area.

3:00 pm. Silt fence installation along the southeast channel stops as the crew moves to the northeast corner of the site and begins to install silt fence at the stormwater inlet. Two mallard and one snowy egret are on the stormwater inlet structure and are unaffected by work activities. Two European starlings fly along the north fence, and two northern rough-winged swallows fly across Washington Boulevard. Two adult killdeer, unassociated with the chicks, are observed walking around the stormwater inlet. They stay near the inlet and occasionally venture to the northeast peninsula. The biologist surveys the shoreline. No nests are observed, but a potential nest scrape is recorded.

3:30 pm. The mourning dove continues to sit on its nest, and no activity on or near the active killdeer nest is observed. The two adult killdeer with three chicks approach to within 100-feet of the nest, but forage along the water's edge. A great blue heron lands at the tide gates.

3:50 pm. The construction contractor crew stops work for the day and everyone leaves the site by 4:00 pm.

Weather conditions during the day were foggy with a light mist in the morning, and remaining mostly cloudy in the afternoon with temperatures in the upper 60s (°F). No measureable rain was recorded.

## Additional Observations

Throughout the day, the biologist observed several birds, as listed in Table 1.

No monarch butterflies were observed today. Cabbage white butterflies were the only butterflies observed.

The California least tern that has been reported previously was not observed during the day's monitoring. **If the tern had approached work activities, all work would be stopped. Consistent with CDFW guidance from Betty Courtney on June 2, 2015 (personal communication via email to CDM Smith), "...everyone just needs to avoid the least tern so there is no direct mortality or capture, as defined by the code."**

An osprey was observed within the project site for the first time since construction began on June 1, 2015. An osprey was repeatedly observed during tree removal activities in January 2015, but it was assumed that it had migrated north for the summer. It is unknown if this is the same individual, but there is a high probability it is. In January, the osprey would fly in with a fish and would feed on power poles or large pines overlooking the water. Today, the osprey circled the Basin once before perching on top of the large pine next to the tide gates. The osprey left the site for a few minutes before returning to the pine. The total time the osprey spent on site was 21 minutes.

The original active killdeer nest is now inactive as no eggs remain and the young have fledged. The two

adults and three young show no site fidelity to the former nest site and forage for food throughout the Basin, particularly along north and west shorelines.

Two new active (i.e. containing eggs and/or nesting adults) nests were discovered while searching for the missing fourth egg (believed to be abandoned) from the original, and now inactive, killdeer nest.

- **Killdeer Nest 2** – Approximately 8 feet to the southwest of the inactive killdeer nest is a second, active killdeer nest containing four eggs. The nest was observed by the biologist throughout the day and no adult killdeer ever approached within 75 feet of the nest or displayed any nesting behavior. When the two adult killdeer and three young were on the north mudflats, the adults would chase away any other killdeer that ventured in the area. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive.
- **Mourning Dove Nest** - Approximately 8 feet to the west of the inactive killdeer nest is an active mourning dove nest containing two eggs. The two eggs are located in a flimsy nest of twigs and grasses sitting on the ground amongst grasses and pickleweed. The adult was observed incubating the eggs throughout the day. The adult would not flush from the nest until the biologist would get within five feet. The adult would hunker down and stay still to avoid detection.

Table 1 provides a list of bird species observed during biological monitoring on June 15, 2015.

<b>Table 1. Bird Species Observed during Biological Monitoring on June 15, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
Gadwall	<i>Anas strepera</i>	2 individuals foraging in the eastern Basin
Mallard	<i>Anas platyrhynchos</i>	12-15 individuals, including "eclipse" males resting/foraging throughout Basin
Snowy Egret	<i>Egretta thula</i>	3-4 individuals resting/foraging in Basin
Great Egret	<i>Ardea alba</i>	1 individual observed foraging at the tide gates
Great Blue Heron	<i>Ardea herodias</i>	1 individual observed moving about the Basin
Green Heron	<i>Butorides virescens</i>	1 individual observed in the western Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	3-4 adults and juveniles foraging in Basin
Double-crested Cormorant	<i>Phalacrocorax penicillatus</i>	1 individual observed in the central Basin and flying over the Basin
Killdeer	<i>Charadrius vociferous</i>	2 adults and their three offspring observed on north and west shores of Basin; 2 additional adults also observed near stormwater inlet; A new active nest with 4 eggs discovered 8 feet southwest of inactive killdeer nest
Western Gull	<i>Larus occidentalis</i>	Very common; several flyovers of the Basin.
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed around Basin; largely along the east and north fences

Black-chinned Hummingbird	<i>Archilochus alexandri</i>	1 individual in the large pine tree near the tide gates
Rock Pigeon	<i>Columba livia</i>	Several observed flying over Basin, particularly in western portion and around high-rises south of Admiralty Way
Mourning Dove	<i>Zenaida macroura</i>	Several observed, particularly on power lines in the northern and western portions of the basin; An active nest with incubating adult observed on ground 8 feet to the west of inactive killdeer nest – north shore on east side of northwest peninsula
American Crow	<i>Corvus brachyrhynchos</i>	Several observed in vegetation, on utility poles, and flying over Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Several observed flying over Basin
Barn Swallow	<i>Hirundo rustica</i>	4-5 individuals observed flying over the western Basin
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual observed to south of site on a light pole along Admiralty Way
Black Phoebe	<i>Sayornis nigricans</i>	2 individuals foraging around Basin
House Finch	<i>Haemorhous mexicanus</i>	Very common; several observed in vegetation and on fences throughout the Basin
House Sparrow	<i>Passer domesticus</i>	Several heard in Yvonne Burke Park to the southeast of the site
Dark-eyed Junco	<i>Junco hyemalis</i>	2 observed in trees along the bike path near the pump house
European Starling	<i>Sturnus vulgaris</i>	2 observed perched or flying over, primarily along Washington Blvd

## Conclusions

Biological monitoring was conducted on June 15, 2015, during minor vegetation removal by hand, installation of BMPs (silt fence), and stringing of temporary power lines at the site. Based on observations made during monitoring, the following conclusions were made:

1. Several bird species are present, foraging around the Basin. As the Basin transitions from a closed canopy to an open system, a larger number species that favor open, scrub habitats are being observed. The greatest songbird density is located near the bike path along the eastern fence of the site.
2. The original killdeer nest is now inactive, with two adults and three young foraging throughout the Basin and showing no site fidelity to the former nest site. In addition to foraging on the north and west shorelines, the adults and young were observed foraging around the construction trailer and Parking Lot No. 8. While they are tolerant of human activities, the adults give an alarm call and shield the young if approached to within 15-20 feet of their location. The Biologist will continue to monitor the killdeer and their young so that construction activities have no effect on them.

3. A second, active killdeer nest was discovered approximately 8 feet southwest of the original killdeer nest site. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive. The biologist will continue to maintain nesting buffers, and will observe the nest to determine if it will remain active.
4. An active mourning dove nest was discovered approximately 8 feet west of the original killdeer nest site. The adult was observed incubating the two eggs throughout the day. The adult would not flush from the nest until the biologist would get within five feet. The adult would hunker down and stay still to avoid detection. Mourning doves are extremely tolerant of human activity, often nesting in gutters, lamp posts, and even construction equipment. Given the proximity of the nest to the original killdeer nest, it's assumed the eggs were laid June 13 or June 14. The eggs are incubated for two weeks, and the young are fledged after another two weeks. The biologist will continue to maintain nesting buffers, and will observe the nest to determine if it will remain active.
5. The Draft Nesting Bird Management Plan that was submitted to CDFW by CDM Smith, on behalf of the County on June 9, 2015, for the original killdeer nest now needs to be updated for the second active killdeer nest and the active mourning dove nest. Due to the close proximity of the two active nests to the original killdeer nest, the original nest buffers for the first killdeer nest, as outlined in the Nesting Bird Management Plan, remain in place. They have been clearly flagged and all work activities are prohibited until the nests are no longer active. As construction activities progress, the biologist will continue to observe the nests for signs of disturbance during different stages of construction activities or noise and enforce appropriate buffer distances that prevent disturbance to the nesting killdeer and doves.
6. Wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
7. Significant algal cover was observed throughout the Basin. When water leaked in from the west tide gate, the biologist observed algae moving away from the gate, creating a small area of clear water until the flow ceased and the algae moved back in. Algal coverage is highest in the eastern Basin and increases as the day goes on.
8. Although the California least tern was not observed in the Basin today, it has been reported previously. CDFW recommends that avoidance is the best practice for avoiding take. As long as no activities result in direct mortality or capture, they can continue. To ensure no mortality or capture occurs, the biologist will temporarily stop work if the tern approaches work areas. In the unlikely event that the tern displays nesting behaviors, the biologist will stop work and CDFW will be contacted immediately.



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Matt Petty, CDM Smith*

*Date: June 16, 2015*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on June 16, 2015. Monitoring is being conducted on a daily basis through completion of construction activities for the Oxford Retention Basin Multiuse Enhancement project. This monitoring is being conducted in compliance with the Streambed Alteration Agreement and Amendment issued by the California Department of Fish and Wildlife for the project.

## Methods

Biological monitoring was conducted by Matt Petty, CDM Smith biologist on June 16, 2015, beginning at 7:20 am and ending at 4:10 p.m. In accordance with the CDFW Streambed Alteration Agreement (Amendment 9, Section 2.32), the weather was checked to determine if rainfall in excess of the threshold (greater than 0.02 inch of rain, with 50% chance of rain or greater probability) was forecast. The forecast showed 0 percent chance of rain predicted for June 16, 2015. As stated in Amendment 9, "...if measurable rain...is predicted, all work activities shall cease and protective measures to prevent erosion/siltation shall be implemented/maintained."

**Per Betty Courtney, CDFW has reviewed the Draft Bird Nesting Management Plan. CDM Smith incorporated the following language into the Draft Bird Nesting Management Plan and resubmitted the document to Betty Courtney, CDFW on June 11, 2015. "The Department's only concern is the nesting buffer should be based upon no disturbance to the bird as it relates to all activities, not just based on the biologist approaching the nest on foot. An individual walking by has a different effect on birds than construction equipment, activities, or noise. Therefore, the buffer should be established based on observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503." The CDM Smith biologist followed CDFW guidance regarding observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503.**

An inactive killdeer nest is present in the mudflat area on the north shore of the Basin. The three young have fledged and the fourth, abandoned egg is no longer at the nest site. The killdeer no

longer show site fidelity to the former active nest and wander the entirety of the Basin, with most activity along the north and west banks. When active, 300-foot buffers clearly marked with tape were placed around the nest. All work activities have thus far been prohibited within the 300-foot buffers, with the exception of removal of chain link fencing approximately 250 feet to the west and out of view from the killdeer nest. During the fence removal, the killdeer was not flushed from the nest.

During the daily monitoring on June 16, 2015, the biologist observed minor vegetation removal by hand associated with BMP installation, installation of BMPs (silt fence), and removal of the YSI water quality probe at the site. A crew of two workers conducted the vegetation removal and BMP installation, and were overseen by the contractor superintendent and the Inspector of Record. A second crew of two from Los Angeles County Department of Public Works worked on the removal of the YSI water quality probe at the tide gates.

The following sections provide the biologist's field log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

7:20 am. The biologist arrived at Oxford Basin (site) and prepared and organized field equipment for initial biological survey.

7:30 am. The biologist begins the initial biological survey. One barn swallow and one black-crowned night heron are observed along the west bank. Three house finches are observed near the tide gates. The two adult killdeer and one chick are observed at the construction trailer. One snowy egret is fishing on the northwest mudflats. Fifteen mallards are foraging in the central Basin, as a flock of nine rock pigeons and several western gulls fly over. A California ground squirrel is observed on the northeast peninsula before fleeing into its burrow. The mourning dove is observed on its nest, and the four killdeer eggs in the active nest are present but no adult is observed on the nest or in the vicinity. One chipping sparrow and six house finches are observed on the northeast peninsula. Three European starlings and three American crows are present in the palms along Washington Boulevard. One barn swallow and two black phoebes are observed at the stormwater inlet. Four mourning doves perch on the utility lines in the northeast corner of the site, and four house finch forage along the northeast fence. Along the bike path, two dark-eyed juncos, two Anna's hummingbirds, two house finches, and several northern rough-winged swallows are observed. Four barn swallows, three house finches, two black-crowned night herons, one black phoebe, and two American crows are observed along the southeast channel.

7:45 am. The construction contractor superintendent (superintendent) arrives at the construction trailer with a crew of two workers.

8:00 am. The biologist conducts Bio-awareness Training with the contractor crew. The biologist explained that two new nests have been discovered and no one should enter the buffer areas, which

are clearly flagged, and to adhere to BMPs to prevent soil erosion into the Basin. The contractor crew signed the sign-in sheet indicating they understood and will follow BMPs and wildlife protection measures. The superintendent explained that the planned activities for the day included installation of silt fencing.

8:15 am. Minor vegetation clearing with shovels, associated with silt fence installation, begins in the northeast corner of the site near the stormwater inlet. The Inspector of Record arrives on-site. Several barn swallows circle the eastern Basin and a western gull flies over the work area. Three house finches forage approximately 75 feet from the work area and are unaffected by work activities. An American crow and an adult killdeer harass one another along the south shoreline.

8:45 am. Algal coverage in the Basin is high, especially in the eastern and central Basin. A northern mockingbird lands on a sprinkler head approximately 50 feet from the work area and calls for 15 minutes before flying off to the east. Barn and northern rough-winged swallows circle the eastern Basin foraging on insects. A lesser goldfinch is observed foraging along the south shoreline.

9:30 am. Minor vegetation removal and silt fence installation continues along the east bank. Wildlife is not observed in the vicinity of work activities. Wildlife activity on-site is largely limited to five American crows probing the southeast channel; a flock of 3-6 house finches foraging in the northeast corner; and, 12-15 mallards sleeping along the northern mudflats. Crows continually harass the adult killdeer with young on the west bank.

10:00 am. A great egret and snowy egret land on the northwest mudflats and begin fishing. Two northern mockingbirds call from a palm tree along Washington Boulevard. The flock of house finches continues to forage in the northeast corner of the site. One monarch flies into the work area and lands approximately 20 feet away. Work is temporarily stopped until the monarch flies to the north three minutes later. One western gull and one black-crowned night heron fly over the east Basin. The group of mallards observed earlier begin to leave the Basin to the northwest in groups of 2-3.

10:30 am. Minor vegetation removal and silt fence installation continues along the east bank towards the pump house. The killdeer and crows continue to do battle on the west bank. The crows appear more intent on searching for eggs than pursuing the young as they pick up pebbles as they walk. Very little wildlife activity occurs near the work area. One black phoebe forages along the southeast channel. Along the bike path, dark-eyed juncos, house finches, northern rough-winged swallows, Anna's hummingbirds, American crows, northern mockingbirds, and house sparrows fly among the houses and trees.

10:45 am. A Los Angeles County Department of Public Works (LACDPW) crew of two arrives at the tide gates to take down the YSI water quality meter. The biologist conducts the Bio-awareness Training and both LACDPW employees sign the sign-in sheet. The biologist instructs to pay particular attention to a snowy egret, approximately 200 feet away, as they are known to fly in and

fish from the tide gates even when humans are present.

11:15 am. After observing the killdeer parents and young all morning, the biologist can only confirm that two young remain. However, the young are routinely observed more than 200 feet away from the closest parent; therefore, the third young killdeer may still be alive. Five house finches are observed foraging on the west bank. The mourning dove is observed on its nest; no adult killdeer is on or near the active killdeer nest.

11:50 am. The YSI meter is removed without incident, and silt fence has been installed along the east bank from the stormwater inlet to the pump house. The LACDPW crew leaves the site and the construction contractor crew breaks for lunch. One snowy egret flies in and both killdeer parents aggressively force it to land on the west bank away from the two chicks.

1:00 pm. The construction contractor crews return to installing silt fence around the pump house. A LACDPW truck sits inside the fence at the southeast channel gate. One LACDPW employee sits in the truck eating lunch. He does not get out of the truck and leaves through the gate at 1:25 pm. Two adult killdeer and two chicks are observed at the construction trailer on the west bank. After a large group of mallards were observed in the morning, no waterfowl remain within the Basin. Four mourning doves forage along the south bank, and a great egret is observed fishing along the south shore. Two American crows and one snowy egret forage along the southeast channel. Two dark-eyed juncos are in a eucalyptus tree along the bike path. One California mouse is observed feeding along the stormwater outlet at the end of the southeast channel. It scampers into a burrow as the biologist approaches.

1:30 pm. Silt fence installation between the pump house and the stormwater outlet at the end of the southeast channel requires hand removal of woody shrubs. Due to the potential for these thickets to possess wildlife, the biologist inspects each prior to removal. No wildlife or nests/burrows are observed. A mourning dove watches work activities from the pump house roof.

2:00 pm. Silt fence installation around the southeast channel is completed and the crew takes a break at the construction trailer. Silt fence now stretches from the construction trailer to the tide gates and all along the south shoreline to the pump house. From the pump house, it continues along the east bank to the stormwater inlet. A great blue heron flies over the Basin and lands at the tide gates where a snowy egret is already fishing. A great egret stalks the shallows of the northwest mudflat. A western gull lands in the central Basin where three mallards forage. Two mourning doves perch on the south fence. The two adult killdeer and two young forage near the construction trailer on the west bank.

2:30 pm. The biologist uses the break to observe the active killdeer and mourning dove nests. The killdeer nest remains unoccupied. No adult killdeer have been observed at or near the nest all day. The mourning dove sits on its nest, where it has remained all day.

2:45 pm. Minor vegetation removal by hand and silt fence installation begins around the northeast peninsula up to the 300-foot nest buffer tape. A double-crested cormorant watches activities from the stormwater inlet. Three house finches perch on the north fence, and two American crows perch atop utility poles along the north shore. Four mallards forage in the eastern Basin, as one northern rough-winged swallow circles above.

3:30 pm. Splashing, roughly 30 feet off of the northern mudflats in the central Basin, reveals a rock pigeon struggling in the water. Rock pigeons cannot swim and their feathers are not waterproof. As such, the wet feathers begin to weigh the pigeon down and the bird struggles to keep its head above water.

3:45 pm. The construction contractor crew stops work for the day. The biologist rescues the drowning rock pigeon by wading into the Basin and using the 15-foot trash grate hook from the pump house to gently prod the pigeon to shore. Once on the shore, the biologist noticed the pigeon has a severely broken wing and is near death. The biologist carries the pigeon in a shovel to the northeast peninsula and places it in the shade of a bush where it dies approximately 15 minutes later.

4:10 pm. Everyone leaves the site for the day.

Weather conditions during the day were partly cloudy with temperatures in the upper 60s (°F). No measureable rain was recorded.

## Additional Observations

Throughout the day, the biologist observed several birds, as listed in Table 1.

One monarch butterfly was observed today along the eastern shoreline of the Basin. Several cabbage white butterflies were also observed.

Mammal observations within the project site have been rare. Today, a California ground squirrel (*Otospermophilus beecheyi*) was observed on the northwest peninsula near its burrow in the early morning. In the afternoon, a California mouse (*Peromyscus californicus*) was observed foraging around the southeast channel outlet/overflow structure.

The California least tern that has been reported previously was not observed during the day's monitoring. **If the tern had approached work activities, all work would be stopped. Consistent with CDFW guidance from Betty Courtney on June 2, 2015 (personal communication via email to CDM Smith), "...everyone just needs to avoid the least tern so there is no direct mortality or capture, as defined by the code."**

The osprey that had been observed yesterday was not observed during the day's monitoring.

The original active killdeer nest is now inactive as no eggs remain and the young have fledged. The two adults and at least two young show no site fidelity to the former nest site and forage for food throughout the Basin, particularly along north and west shorelines. The killdeer were observed throughout the day and only two young were ever seen at the same time. It's possible that the third young killdeer has been

The two new active (i.e. containing eggs and/or nesting adults) nests discovered yesterday near the original, and now inactive, killdeer nest were observed throughout the day.

- **Killdeer Nest 2** – Approximately 8 feet to the southwest of the inactive killdeer nest is a second, active killdeer nest containing four eggs. For the second straight day, no adult was observed at the nest or within the vicinity of the nest. When approaching the nest, no adult exhibits typical nesting behaviors to lead the biologist away from the nest. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive.
- **Mourning Dove Nest** - Approximately 8 feet to the west of the inactive killdeer nest is an active mourning dove nest containing two eggs. The two eggs are located in a flimsy nest of twigs and grasses sitting on the ground amongst grasses and pickleweed. The adult was observed incubating the eggs the entire day and was never flushed.

Table 1 provides a list of bird species observed during biological monitoring on June 16, 2015.

<b>Table 1. Bird Species Observed during Biological Monitoring on June 16, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
Mallard	<i>Anas platyrhynchos</i>	12-15 individuals, including "eclipse" males resting/foraging throughout Basin
Snowy Egret	<i>Egretta thula</i>	3-4 individuals resting/foraging in Basin
Great Egret	<i>Ardea alba</i>	1 individual observed foraging throughout Basin
Great Blue Heron	<i>Ardea herodias</i>	1 individual observed flying over the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	3-4 adults and juveniles foraging in Basin
Double-crested Cormorant	<i>Phalacrocorax penicillatus</i>	1 individual observed on the stormwater inlet
Killdeer	<i>Charadrius vociferous</i>	2 adults and at least two offspring observed on north and west shores of Basin; 2 additional adults observed throughout Basin; A new active nest with 4 eggs discovered 8 feet southwest of inactive killdeer nest
Western Gull	<i>Larus occidentalis</i>	Very common; several flyovers of the Basin.
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed around Basin; largely along the east and north fences
Rock Pigeon	<i>Columba livia</i>	Several observed flying over Basin, particularly in

		western portion and around high-rises south of Admiralty Way
Mourning Dove	<i>Zenaida macroura</i>	Several observed, particularly on power lines in the northern and western portions of the basin; An active nest with incubating adult observed on ground 8 feet to the west of inactive killdeer nest – north shore on east side of northwest peninsula
American Crow	<i>Corvus brachyrhynchos</i>	Several observed in vegetation, on utility poles, and flying over Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Several observed flying over eastern Basin
Barn Swallow	<i>Hirundo rustica</i>	Several observed flying throughout the Basin
Northern Mockingbird	<i>Mimus polyglottos</i>	2 individuals observed in northeast corner of site and along bike path
Black Phoebe	<i>Sayornis nigricans</i>	2-3 individuals foraging around Basin
House Finch	<i>Haemorhous mexicanus</i>	Very common; several observed in vegetation and on fences throughout the Basin
House Sparrow	<i>Passer domesticus</i>	2 observed along south fence
Chipping Sparrow	<i>Spizella pallida</i>	1 observed in brush on northeast peninsula
Lesser Goldfinch	<i>Carduelis psaltria</i>	1 individual observed along south shore of Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	2 observed in trees along the bike path near the pump house
European Starling	<i>Sturnus vulgaris</i>	Several observed perched on north fence or flying over site; primarily along Washington Blvd

## Conclusions

Biological monitoring was conducted on June 16, 2015, during minor vegetation removal by hand, installation of BMPs (silt fence), and removal of the YSI water quality probe at the site. Based on observations made during monitoring, the following conclusions were made:

1. Several bird species are present, foraging around the Basin. As the Basin transitions from a closed canopy to an open system, a larger number species that favor open, scrub habitats are being observed. The greatest songbird density is located near the bike path along the eastern fence of the site.
2. The original killdeer nest is now inactive, with two adults and at least two remaining young foraging throughout the Basin and showing no site fidelity to the former nest site. In addition to foraging on the north and west shorelines, the adults and young were observed foraging around the construction trailer and Parking Lot No. 8. While they are tolerant of human activities, the adults give an alarm call and shield the young if approached to within 15-20 feet of their location. The Biologist will continue to monitor the killdeer and their young so that construction activities have no effect on them.
3. A second, active killdeer nest was discovered approximately 8 feet southwest of the original killdeer nest site. Due to the proximity to the original nest, territoriality of killdeer, lack of adult

presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active. Refer to Methods section of this document for more detail on CDFW guidance.

4. An active mourning dove nest was discovered approximately 8 feet west of the original killdeer nest site. The adult was observed incubating the two eggs throughout the day. The adult never left the nest, and did not flush when the biologist approached to check on the nest. Mourning doves are extremely tolerant of human activity, often nesting in gutters, lamp posts, and even construction equipment. Given the proximity of the nest to the original killdeer nest, it's assumed the eggs were laid June 13 or June 14. The eggs are incubated for two weeks, and the young are fledged after another two weeks. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active. Biologist observations and documented species tolerance may result in a smaller buffer around the mourning dove nest in order to remain in compliance with CDFW guidance and FG Code section 3503. Refer to Methods section of this document for more detail on CDFW guidance.
5. The Draft Nesting Bird Management Plan that was submitted to CDFW by CDM Smith, on behalf of the County on June 9, 2015, for the original killdeer nest now needs to be updated for the second active killdeer nest and the active mourning dove nest. Due to the close proximity of the two active nests to the original killdeer nest, the original nest buffers for the first killdeer nest, as outlined in the Nesting Bird Management Plan, remain in place. They have been clearly flagged and all work activities are prohibited until the nests are no longer active. As construction activities progress, the biologist will continue to observe the nests for signs of disturbance during different stages of construction activities or noise and enforce appropriate buffer distances that prevent disturbance to the nesting killdeer and doves. Biologist observations and documented species tolerance may result in a smaller buffer around the mourning dove nest in order to remain in compliance with CDFW guidance and FG Code section 3503. Refer to Methods section of this document for more detail on CDFW guidance.
6. Wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
7. Significant algal cover was observed throughout the Basin. When water leaked in from the west tide gate, the biologist observed algae moving away from the gate, creating a small area of clear water until the flow ceased and the algae moved back in. Algal coverage is highest in the eastern Basin and often increases as the day goes on as the Basin is exposed to more sunlight.
8. Although the California least tern was not observed in the Basin today, it has been reported previously. CDFW recommends that avoidance is the best practice for avoiding take. As long as no activities result in direct mortality or capture, they can continue. To ensure no mortality or

capture occurs, the biologist will temporarily stop work if the tern approaches work areas. In the unlikely event that the tern displays nesting behaviors, the biologist will stop work and CDFW will be contacted immediately.

9. The biologist made the decision to rescue the injured rock pigeon to prevent it from drowning. Pigeons cannot swim and its feathers quickly become waterlogged, weighing the bird down. Due to the energy expended while struggling, this pigeon could barely keep its head above water. The pigeon was about 30 feet from the water's edge off of the northern mudflats in the central Basin. Using a 15-foot hook used to clean the trash grates at the tide gates, the biologist waded into the Basin and carefully brought the pigeon to shore. Once the pigeon was brought to shore, the biologist realized the pigeon had a severely broken wing and was near death. The biologist carried the pigeon with a shovel to the northeast peninsula where it was set down in a cleared area in the shade of a bush. The biologist observed the pigeon until it died approximately 15 minutes later. The injury and death were unrelated to project activities.



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Matt Petty, CDM Smith*

*Date: June 17, 2015*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on June 17, 2015. Monitoring is being conducted on a daily basis through completion of construction activities for the Oxford Retention Basin Multiuse Enhancement project. This monitoring is being conducted in compliance with the Streambed Alteration Agreement and Amendment issued by the California Department of Fish and Wildlife for the project.

## Methods

Biological monitoring was conducted by Matt Petty, CDM Smith biologist on June 17, 2015, beginning at 7:15 am and ending at 4:15 p.m. In accordance with the CDFW Streambed Alteration Agreement (Amendment 9, Section 2.32), the weather was checked to determine if rainfall in excess of the threshold (greater than 0.02 inch of rain, with 50% chance of rain or greater probability) was forecast. The forecast showed 0 percent chance of rain predicted for June 17, 2015. As stated in Amendment 9, "...if measurable rain...is predicted, all work activities shall cease and protective measures to prevent erosion/siltation shall be implemented/maintained."

**Per Betty Courtney, CDFW has reviewed the Draft Bird Nesting Management Plan. CDM Smith incorporated the following language into the Draft Bird Nesting Management Plan and resubmitted the document to Betty Courtney, CDFW on June 11, 2015. "The Department's only concern is the nesting buffer should be based upon no disturbance to the bird as it relates to all activities, not just based on the biologist approaching the nest on foot. An individual walking by has a different effect on birds than construction equipment, activities, or noise. Therefore, the buffer should be established based on observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503." The CDM Smith biologist followed CDFW guidance regarding observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503.**

An inactive killdeer nest is present in the mudflat area on the north shore of the Basin. The three young have fledged and the fourth, abandoned egg is no longer at the nest site. The killdeer no

longer show site fidelity to the former active nest and wander the entirety of the Basin, with most activity along the north and west banks. The 300-foot buffer exclusion tapes were removed. Vegetation and fence removal and sign installation was allowed approximately 200 feet from the inactive nest.

During the daily monitoring on June 17, 2015, the biologist observed minor vegetation removal by hand associated with BMP installation, installation of BMPs (straw wattles), temporary power line installation, and sign installation at the site. A crew of two workers conducted the vegetation removal and BMP installation, and were overseen by the contractor superintendent and the Inspector of Record. A second crew of two from Power Plus worked on the installation of temporary power lines along the east bank of the Basin. A crew of one person from NCB/Horizon worked on stabilizing previously installed signage.

The following sections provide the biologist's field log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

7:15 am. The biologist arrived at Oxford Basin (site) and prepared and organized field equipment for initial biological survey. The Inspector of Record is on-site.

7:25 am. The biologist begins the initial biological survey. The construction contractor superintendent and one crewmember arrive. One osprey is observed perching in the large pine next to the tide gates. Two adult killdeer and two young are observed at the construction trailer on the west bank. Two American crows perch in the palms along Washington Boulevard, and one northern rough-winged swallow circles the western Basin. Eight house finches forage along the north fence and two house sparrows forage along the north shore. The mourning dove is observed on its nest, and the killdeer nest still contains four eggs, but no adult is present on or near the nest. Two great blue herons, one great egret, and three black-crowned night herons are foraging in the eastern Basin. Six snowy egrets, two great blue herons, and three black-crowned night herons are foraging in the southeast channel. The water levels are very low in the eastern Basin and southeast channel and is attracting wading birds in large numbers, including several juveniles. A noticeable, sulfuric odor is present in the southeast channel. Five mallards forage along the south shoreline, and two barn swallows circle the eastern Basin. One black phoebe, one northern mockingbird, and two house finches are perched in the northeast corner of the site. One Anna's hummingbird, one dark-eyed junco, and two American crows are located in trees along the bike path. Four rock pigeons are observed around high-rises across Admiralty Way. Three mourning doves forage along the south bank, and several western gulls fly over the Basin. Fresh raccoon tracks and dog scat is found on the north mudflats.

8:00 am. The second contractor crewmember arrives and the crew begins unloading and stacking plastic planters (buckets) in the staging area in Parking Lot No. 8. The biologist conducts Bio-awareness Training with the contractor crew. The biologist points out the osprey in the pine near

the tide gates and the killdeer family near the construction trailer. The biologist explained that no one should enter the inner buffer areas, which are clearly flagged, and to adhere to BMPs to prevent soil erosion into the Basin. The contractor crew signed the sign-in sheet indicating they understood and will follow BMPs and wildlife protection measures. The superintendent explained that the planned activities for the day included installation of straw wattles.

8:15 am. Minor vegetation clearing with shovels begins in the northwest corner of the site. Due to the inactive status of the first killdeer nest, the tolerance of the nesting dove, and the absence of nesting adults at the second killdeer nest, the biologist allows the contractor crew to conduct vegetation clearing along the north fence, but not within the 75- and 150-foot nest buffers outlined in the Bird Nesting Management Plan. Three house finches perch on power lines above the work area, and the killdeer family are observed in the southwest corner of the site (500 feet south of the work area). The nesting mourning dove is undisturbed and sleeps. The osprey circles the western Basin once and returns to its perch atop the pine at the tide gates.

8:30 am. The American Fence Company (AFC) arrives at the construction trailer hauling additional chain-link fence. The biologist conducts the Bio-awareness Training with the AFC crew of two. One black phoebe and two house finches forage on the northwest peninsula roughly 150 feet from vegetation clearing along the north fence. At 8:33 am, the osprey flies off to the southwest.

8:45 am. Hand clearing of vegetation along the north fence reaches the 75-foot nesting buffer and stops as instructed. The killdeer nest remains unoccupied, and the mourning dove is not disturbed. Five mallards land in the central Basin (10 total on-site). European starling, house finch, and swallow activity is observed above the houses on the other side of Washington Boulevard. The osprey returns and perches atop the large pine it was in earlier.

9:00 am. Contractor crews begin installing straw wattle BMPs in the northwest corner of the site along the north fence. A two-member crew from Power Plus arrives. They speak with the contractor superintendent and move their truck to the pump house gate for work along the east bank. Six mallards fly over the BMP installation and exit the site to the northwest. The nesting mourning dove is unfazed by BMP installation. Two northern rough-winged swallows circle the western Basin.

9:30 am. The biologist conducts Bio-awareness Training with the Power Plus crew. In addition to usual discussion on BMPs and wildlife protection, the Training focuses on driving slow and birds perched on temporary power poles. Both Power Plus crewmembers sign the sign-in sheet. The osprey circles the western Basin, flushing a snowy egret and adult killdeer from the shoreline.

9:45 am. Power Plus crews begin work – laying out line between temporary power poles from the stormwater inlet to the pump house. No wildlife is affected. Four mallards and one great blue heron at the stormwater inlet watch the activity at a distance. A mourning dove on a nearby permanent power line and three house finches on the east fence are unfazed by activities. Straw

wattle installation in the northwest corner is completed.

10:15 am. Under the careful watch of the biologist, weed-whacking begins in the northwest corner. The killdeer and two young are on the northwest mudflats foraging along the water's edge approximately 150 feet from the work area. One monarch is observed flying along the west bank away from the work area. The osprey remains perched in the pine at the tide gates above a snowy egret fishing at the tide gates. Wildlife generally avoid the area in the vicinity of the weed-whacking. There are infrequent swallow and house finch flyovers of the work area. Power Plus crews begin stringing lines between temporary power poles beginning at the pump house.

10:45 am. Weed-whacking of short herbaceous vegetation continues. It occurs from the north fence down to the sea lavender line (roughly  $\frac{3}{4}$  of the way down slope). The killdeer family continues to stay approximately 150 feet away on the northwest mudflat. The mourning dove shows no reaction to weed-whacking activities, which come within 200-feet of the nest. The killdeer nest remains unoccupied. The osprey flies over the Basin and leaves the site to the east.

11:10 am. Weed-whacking (northwest corner) and stringing of temporary power line (east bank) continues. Three mourning doves, two house sparrows, and four house finches forage along the north bank approximately 100 feet from the vegetation removal activities. Both barn and northern rough-winged swallows circle the eastern Basin.

11:30 am. Vegetation clearing with the weed-whacker ends in the northwest corner of the site. No clearing occurs within 200-feet of the mourning dove and killdeer nests. Contractor crews turn their focus to the stockpiled old chain-link fence on the west bank. Crews move the fence by hand to an area near the construction trailer for future recycling. A two-person crew from NCB/Horizon arrive to stabilize signage that was previously installed. The biologist conducts Bio-awareness Training with the Inspector of Record present, focusing on birds landing on or near signs. The biologist also explains that water from the portable tank being used to compact soils cannot run downslope and into the Basin. No driving is allowed in vegetated areas. Both members sign the sign-in sheet, but one member of the NCB/Horizon crew is a supervisor and leaves following Bio-awareness Training.

12:00 pm. All construction crews and the biologist break for lunch.

1:00 pm. The Power Plus crew resumes stringing wire in the northeast corner. The contractor crew uses the tractor to remove the old chain-link fence, including cemented poles, from the northwest corner and west bank. Once pulled from the ground, a sledgehammer is used to break up the concrete bases. A snowy egret is at the tide gates fishing, and one adult killdeer and two young are present on the west bank (roughly 150 feet from the work area). Two house sparrows are perched on the north fence, and two house finches, one mourning dove, and one lesser goldfinch are located in the southwest corner of the site. One double-crested cormorant lands in the eastern Basin and begins fishing. Western gulls and rock pigeons frequently fly over the work area. The nesting

mourning dove, approximately 200 feet away, is undisturbed by mechanized construction activities, and the killdeer nest remains unoccupied.

1:30 pm. The sign installer arrives at the northwest corner and explains the nearby sign is the last of four that he has reset in the ground using a combination of water and precise hammering. With work occurring along the west bank, the killdeer and young move to the northwest mudflats. Two house sparrows forage in sea lavender, roughly 40-feet from the work area.

1:50 pm. The Power Plus crew relocates one temporary power pole in the northeast corner. The sign installer leaves after speaking with the Inspector of Record. One American crow, one northern mockingbird, and three house finches are in the vicinity of the pole relocation but are unaffected. Two great blue herons fly over the Basin; one lands near the stormwater inlet. Fence removal work along the west bank temporarily stops for a few minutes when a mourning dove lands within five feet of the tractor.

2:30 pm. The Power Plus crew finishes work along the east bank by stringing wire to the northeast corner and leaves the site. The third, missing killdeer chick is found dead along the west bank, away from project activities, the victim of a likely American crow attack. There is frequent mourning dove and house finch activity along the west bank, but they avoid the active work area. A snowy egret on the tide gates is unfazed by the work nearby and concentrates on the hundreds of small fish congregated nearby.

2:50 pm. Mechanized fence removal activities end. The contractor crew grab shovels and begin shoring up silt fence around the tide gates. An American crow attempts to land near the killdeer family, but an adult killdeer meets the crow in midair and chases it off.

3:30 pm. Shoring up silt fence continues to the east along the south shoreline. Two Eurasian collared-doves are observed perched in a pine tree along the south bank. Three mallards forage along the south shoreline approximately 50 feet from the work area.

4:00 pm. All work stops for the day.

4:15 pm. Everyone leaves the site for the day. As everyone was leaving, the osprey flew into the site from the east with a large fish in its talons. The osprey landed on a lower limb of the large pine next to the tide gates in the southwestern corner of the site and began to feed of the fish.

Weather conditions during the day were partly sunny with temperatures in the mid-70s (°F). No measureable rain was recorded.

## **Additional Observations**

Throughout the day, the biologist observed several birds, as listed in Table 1.

One monarch butterfly was observed today along the western shoreline of the Basin. Several cabbage white butterflies were also observed.

The California least tern that has been reported previously was not observed during the day's monitoring. **If the tern had approached work activities, all work would be stopped. Consistent with CDFW guidance from Betty Courtney on June 2, 2015 (personal communication via email to CDM Smith), "...everyone just needs to avoid the least tern so there is no direct mortality or capture, as defined by the code."**

The osprey that had been observed earlier in the week spent a significant portion of the day, including most of the morning, perched in the large pine tree near the tide gates in the southwestern corner of the site. At the very end of the day, the osprey returned with a fish in its talons that it had caught elsewhere. It landed in the same large pine and began feeding on the fish.

The original active killdeer nest is now inactive as no eggs remain and the young have fledged. The two adults and two young show no site fidelity to the former nest site and forage for food throughout the Basin, particularly along north and west shorelines. The third young killdeer was found dead on the west bank. Injuries suggest it was killed by a large bird, most likely an American crow. Crows have been harassing the killdeer relentlessly since the young fledged.

The two new active (i.e. containing eggs and/or nesting adults) nests discovered two days ago near the original, and now inactive, killdeer nest were observed throughout the day.

- **Killdeer Nest 2** – Approximately 8 feet to the southwest of the inactive killdeer nest is a second, active killdeer nest containing four eggs. For the third straight day, no adult was observed at the nest or within the vicinity of the nest. When approaching the nest, no adult exhibits typical nesting behaviors to lead the biologist away from the nest. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive.
- **Mourning Dove Nest** - Approximately 8 feet to the west of the inactive killdeer nest is an active mourning dove nest containing two eggs. The two eggs are located in a flimsy nest of twigs and grasses sitting on the ground amongst grasses and pickleweed. The adult was observed incubating the eggs the entire day and was never flushed.

Table 1 provides a list of bird species observed during biological monitoring on June 17, 2015.

<b>Table 1. Bird Species Observed during Biological Monitoring on June 17, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
Mallard	<i>Anas platyrhynchos</i>	10-12 individuals, including “eclipse” males resting/foraging throughout Basin
Snowy Egret	<i>Egretta thula</i>	7-8 individuals resting/foraging in Basin
Great Egret	<i>Ardea alba</i>	1 individual observed foraging throughout Basin
Great Blue Heron	<i>Ardea herodias</i>	4-5 adults and juveniles observed foraging and flying over the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	8-9 adults and juveniles foraging in Basin
Double-crested Cormorant	<i>Phalacrocorax penicillatus</i>	1 individual observed fishing in the western Basin
Killdeer	<i>Charadrius vociferous</i>	2 adults and two offspring observed on north and west shores of Basin; A new active nest with 4 eggs discovered 8 feet southwest of inactive killdeer nest
Western Gull	<i>Larus occidentalis</i>	Very common; several flyovers of the Basin.
Anna’s Hummingbird	<i>Calypte anna</i>	2 individuals observed along the bike path
Rock Pigeon	<i>Columba livia</i>	Several observed flying over Basin, particularly in western portion and around high-rises south of Admiralty Way
Mourning Dove	<i>Zenaida macroura</i>	Several observed, particularly on power lines in the northern and western portions of the basin; An active nest with incubating adult observed on ground 8 feet to the west of inactive killdeer nest – north shore on east side of northwest peninsula
Eurasian Collared-Dove	<i>Streptopelia decaocto</i>	2 individuals observed in pine trees along south bank
American Crow	<i>Corvus brachyrhynchos</i>	Several observed in vegetation, on utility poles, and flying over Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Several observed flying throughout the Basin
Barn Swallow	<i>Hirundo rustica</i>	Several observed flying throughout the Basin
Northern Mockingbird	<i>Mimus polyglottos</i>	2 individuals observed in northeast corner of site and along bike path
Black Phoebe	<i>Sayornis nigricans</i>	2-3 individuals foraging around Basin
House Finch	<i>Haemorhous mexicanus</i>	Very common; several observed in vegetation and on fences throughout the Basin
House Sparrow	<i>Passer domesticus</i>	Several observed along the north and west banks
Lesser Goldfinch	<i>Carduelis psaltria</i>	1 individual along the west bank of the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual observed in trees along the bike path
European Starling	<i>Sturnus vulgaris</i>	Several observed perched on north fence or flying over site; primarily along Washington Blvd

## Conclusions

Biological monitoring was conducted on June 17, 2015, during minor vegetation removal by hand, installation of BMPs (silt fence), and removal of the YSI water quality probe at the site. Based on observations made during monitoring, the following conclusions were made:

1. Several bird species are present, foraging around the Basin. As the Basin transitions from a closed canopy to an open system, a larger number species that favor open, scrub habitats are being observed. The greatest songbird density is located near the bike path along the eastern fence of the site.
2. The original killdeer nest is now inactive, with two adults and two remaining young foraging throughout the Basin and showing no site fidelity to the former nest site. The third chick was found dead on the west bank, a likely American crow victim. In addition to foraging on the north and west shorelines, the adults and remaining young were observed foraging around the construction trailer and Parking Lot No. 8. While they are tolerant of human activities, the adults give an alarm call and shield the young if approached to within 15-20 feet of their location. The Biologist will continue to monitor the killdeer and their young so that construction activities have no effect on them.
3. A second, active killdeer nest was discovered approximately 8 feet southwest of the original killdeer nest site. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active. The 300-foot buffers have been removed.
4. An active mourning dove nest was discovered approximately 8 feet west of the original killdeer nest site. The adult was observed incubating the two eggs throughout the day. The adult never left the nest, and did not flush when the biologist approached to check on the nest. Mourning doves are extremely tolerant of human activity, often nesting in gutters, lamp posts, and even construction equipment. Given the proximity of the nest to the original killdeer nest, it's assumed the eggs were laid June 13 or June 14. The eggs are incubated for two weeks, and the young are fledged after another two weeks. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active. The 300-foot buffers have been removed.
5. CDM Smith has requested guidance from CDFW regarding the second active killdeer nest and the active mourning dove nest. Due to the close proximity of the two active nests to the original killdeer nest, the nest buffers for the first killdeer nest, as outlined in the Nesting Bird Management Plan, remain in place. They have been clearly flagged and all work activities are prohibited until the nests are no longer active. As construction activities progress, the biologist will continue to observe the nests for signs of disturbance during different stages of construction activities or noise and enforce appropriate buffer distances that prevent

disturbance to the nesting killdeer and doves. Biologist observations and documented species tolerance may result in a smaller buffer around the mourning dove nest in order to remain in compliance with CDFW guidance and FG Code section 3503. Refer to Methods section of this document for more detail on CDFW guidance.

6. Wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
7. Significant algal cover was observed throughout the Basin. When water leaked in from the west tide gate, the biologist observed algae moving away from the gate, creating a small area of clear water until the flow ceased and the algae moved back in. Algal coverage is highest in the eastern Basin and often increases as the day goes on as the Basin is exposed to more sunlight.
8. Although the California least tern was not observed in the Basin today, it has been reported previously. CDFW recommends that avoidance is the best practice for avoiding take. As long as no activities result in direct mortality or capture, they can continue. To ensure no mortality or capture occurs, the biologist will temporarily stop work if the tern approaches work areas. In the unlikely event that the tern displays nesting behaviors, the biologist will stop work and CDFW will be contacted immediately.
9. The osprey that was observed two days ago was once again seen in the Basin. It was perched in the large pine tree next to the tide gates when the biologist arrived on site in the morning. It would spend most of the next four hours perched in the top of the tree, with occasional flights where it would circle the Basin and return to the tree. At the end of the day, the osprey returned to the Basin with a large fish in its talons that was caught elsewhere. The osprey took the fish into the large pine where it had perched previously in the morning and fed on the fish. The osprey appears rather disinterested in work activities. The sound of the tractor and weed-whacker did not disturb the osprey or cause it to leave its perch nearby.



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Matt Petty, CDM Smith*

*Date: June 18, 2015*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on June 18, 2015. Monitoring is being conducted on a daily basis through completion of construction activities for the Oxford Retention Basin Multiuse Enhancement project. This monitoring is being conducted in compliance with the Streambed Alteration Agreement and Amendment issued by the California Department of Fish and Wildlife for the project.

## Methods

Biological monitoring was conducted by Matt Petty, CDM Smith biologist on June 18, 2015, beginning at 7:15 am and ending at 4:30 p.m. In accordance with the CDFW Streambed Alteration Agreement (Amendment 9, Section 2.32), the weather was checked to determine if rainfall in excess of the threshold (greater than 0.02 inch of rain, with 50% chance of rain or greater probability) was forecast. The forecast showed 0 percent chance of rain predicted for June 18, 2015. As stated in Amendment 9, "...if measurable rain...is predicted, all work activities shall cease and protective measures to prevent erosion/siltation shall be implemented/maintained."

**Per Betty Courtney, CDFW has reviewed the Draft Bird Nesting Management Plan. CDFW states, "...the buffer should be established based on observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503." The CDM Smith biologist followed CDFW guidance regarding observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503.**

An inactive killdeer nest is present in the mudflat area on the north shore of the Basin. The three young have fledged and the fourth, abandoned egg is no longer at the nest site. The killdeer no longer show site fidelity to the former active nest and wander the entirety of the Basin, with most activity along the north and west banks. Vegetation removal and BMP installation was allowed up to the 75- and 150-foot nesting buffers outlined in the Draft Bird Nesting Management Plan. No mechanized equipment was used.

During the daily monitoring on June 18, 2015, the biologist observed minor vegetation removal by hand associated with BMP installation, installation of BMPs (silt fence and straw wattles), and temporary power line installation at the site. A crew of two workers conducted the vegetation removal and BMP installation, and were overseen by the contractor superintendent and the Inspector of Record. A second crew of two from Power Plus worked on the installation of temporary power lines along the east bank of the Basin and a meter at the tide gates.

The following sections provide the biologist's field log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

7:15 am. The biologist arrived at Oxford Basin (site) and prepared and organized field equipment for initial biological survey.

7:20 am. The biologist begins the initial biological survey. One black-crowned night heron flies over the west bank. Three American crows harass two adult and one fledgling killdeer on the northwest mudflat. One Anna's hummingbird and one black phoebe are perched along the north shore. The nesting mourning dove is on the nest; the active killdeer nest still contains four eggs but no adult is on or near the nest. Six mallards, one great blue heron, one snowy egret, and one black-crowned night heron are foraging in the central Basin. Five snowy egrets and three black-crowned night herons, are foraging in the eastern Basin. The water levels in the Basin are the lowest observed all week and the wading birds are taking advantage of good fishing conditions. Four house finches and two European starlings are present in palms along Washington Boulevard. Two house sparrows are perched on the stormwater inlet structure. Eight house finches and two mourning doves are foraging on banks in the northeast corner of the site. Three barn swallows circle the eastern Basin, and two western gulls fly over the Basin. One bushtit and one house sparrow are observed along the bike path. Two dark-eyed juncos are observed at the pump house, and two rock pigeons are perched on high-rises along Admiralty Way. Four mourning doves and two house finches are foraging along the south bank. A total of 13 mallards are observed within site boundaries.

7:30 am. The contractor superintendent and two crewmembers arrive on-site. An osprey circles the western Basin once and perches in the large pine tree next to the tide gates.

8:00 am. The biologist conducts Bio-awareness Training with the 3-person contractor crew. The biologist points out the osprey in the pine near the tide gates and the killdeer family on the northwest mudflat. The biologist explained that no one should enter the nesting buffer areas, which are clearly flagged, and to adhere to BMPs to prevent soil erosion into the Basin. The contractor crew signed the sign-in sheet indicating they understood and will follow BMPs and wildlife protection measures. The superintendent explained that the planned activities for the day included installation of silt fence and straw wattles. The Inspector of Record arrives on-site.

8:15 am. The crew begins unloading and stacking plastic planters (buckets) in the staging area in

Parking Lot No. 8. The crew then moves the fence poles extracted yesterday into a pile near the construction trailer.

8:30 am. The construction crew begins removing vegetation with shovels at the 150-foot eastern nesting buffer moving towards the northeast corner of the site. The removal of vegetation enables silt fence installation. The biologist watches the two active nests closely to ensure nesting birds are not disturbed. The killdeer nest is unoccupied, and the mourning dove does not appear to see or hear the work at this distance and is undisturbed. House finches and house sparrows fly along the north fence, and one western gull flies over the central Basin. Two gadwall join the group of mallards foraging in the central Basin.

9:00 am. Vegetation removal work continues around the northeast peninsula. Two mallards are sleeping on the stormwater inlet structure and are undisturbed. Three house finches and one northern mockingbird perch in palms along Washington Boulevard. Eight mallards and one black-crowned night heron fly off-site to the northwest. One snowy egret stalks the north mudflat approximately 100 feet from the work area.

9:45 am. Vegetation clearing around the northeast peninsula ends at the installed silt fence near the stormwater inlet. During work, the mourning dove never shows signs of stress and is undisturbed. The killdeer nest remained unoccupied for the duration of the work. Three mallards and two gadwall continue to forage in the eastern Basin. One green heron fishes from the floating berm in the southeast channel.

10:00 am. Vegetation clearing with shovels begins at the 150-foot nesting buffer along the north fence to prepare for straw wattle installation. Vegetation clearing is limited to the base of the north fence and continues to the east until the crew reaches previously-installed wattles at the stormwater inlet. The nesting mourning dove does not react to activities at the 150-foot buffer tape; the killdeer nest remains unoccupied. An American crow perches on a power pole, and a northern mockingbird perches in a palm along Washington Boulevard. Three house finches forage in the northeast corner of the site and a northern rough-winged swallow circles the eastern Basin.

10:30 am. Vegetation clearing along the north fence is completed. One killdeer adult and one fledgling are observed on the northwest mudflats. The second fledgling is nowhere to be seen. The osprey is still perched in the large pine, and a snowy egret fishes at the tide gates. The crew begins to load straw wattles into a pickup truck to drive around the nest exclusion zone to the stormwater inlet gate.

10:45 am. The crew begins installing straw wattles along the north fence from the stormwater inlet to the 150-foot nest buffer. The osprey leaves its perch and circles the western Basin seven times before returning to the pine tree. Twice, when passing over the northwest mudflat, an adult killdeer meets the osprey in midair and drives it off. The mourning dove remains on its nest and a second dove (potentially its mate) forages on the northwest peninsula nearby. Two house finches

and one black phoebe forage along the north bank.

11:00 am. Additional silt fence arrives via truck to the construction trailer. It is unloaded and staged. The construction crew continues to install straw wattles and approach the 150-foot nest buffer. The biologist watches the nests – the killdeer nest is unoccupied and the mourning dove is unaffected. An American crow probes the north mudflat approximately 75 feet from the work area. At 11:10, the osprey flies off-site to the northwest. It is chased by three crows as it flies over residential areas.

11:40 am. Straw wattle installation finishes at the 150-foot nest buffer. Two house sparrows and two mourning doves forage along the north bank. Four house finches forage along the west bank. One great egret and the two adult killdeer with one fledgling are observed on the northwest mudflat. Prior to taking lunch, the crew stacks previously-removed fence poles near the construction trailer and delivers silt fence to the stormwater inlet gate.

12:00 pm. All construction crews and the biologist break for lunch.

12:45 pm. The construction crew begins installing silt fence around the northeast peninsula. One double-crested cormorant flies over the Basin, and one great egret and one snowy egret fish at the tide gates. One adult and one fledgling killdeer are observed on the northwest mudflat. The mourning dove is still present on its nest and the killdeer nest is unoccupied. Three house finches are observed foraging on the north bank, and one western gull flies over the Basin.

1:15 pm. A two-person Power Plus crew arrives on-site at the tide gates. The biologist conducts Bio-awareness Training with a focus on birds that may perch on temporary power structures. The Power Plus crew signs the sign-in sheet. Work for the day will include fixing a drooping power line in the northeast corner and working on a meter at the tide gates. Following Training, the biologist joins the construction meeting already in progress at the construction trailer. The biologist gives a wildlife and nesting update and discusses how it impacts construction and schedule.

1:45 pm. The biologist leaves the meeting and continues observing silt fence installation and electrical meter work. When the Power Plus crew approach the tide gates, a snowy egret and great egret relocated to the northwest mudflat and south shore, respectively. One adult and one fledgling killdeer are observed on the northwest mudflat. Six house finches and a black swallowtail butterfly are observed along the north bank. The mourning dove is observed on its nest, and the killdeer nest remains unoccupied. Silt fence installation around the northeast peninsula is completed at 1:50 pm.

2:00 pm. The construction crew shores up previously-installed silt fence beginning at the stormwater inlet and moving along the east bank to the pump house. Two mallards forage in the eastern Basin, and one green heron and one black-crowned night heron forage within the southeast channel. Two house finches and one Anna's hummingbird are observed along the bike path.

2:35 pm. The Power Plus crew finishes work at the tide gates and move to the northeast corner of the site to fix the drooping power line. Very little wildlife activity is observed in the vicinity of work areas. One western gull flies over the Basin and two mourning doves forage on the south shore.

3:00 pm. The Power Plus crew finishes its work and leaves the site. The shoring up of previously-installed silt fence continues around the pump house. Two mourning doves, one American crow, and two dark-eyed juncos are observed around the southeast channel.

3:30 pm. As the tide comes in, water fills the southeast channel, which is in stark contrast to this morning when the channel was little more than a trickle at low tide. The channel contains significant algae, including both floating and attached green algae. Two American crows, one black phoebe, and one western tiger swallowtail butterfly are observed along the southeast channel. Two house finches perch in the eucalyptus trees near the pump house, and two mourning doves perch on a light pole along Admiralty Way.

4:00 pm. All work stops for the day.

4:30 pm. Everyone leaves the site for the day.

Weather conditions during the day were mostly cloudy in the morning transitioning to partly sunny in the afternoon with temperatures in the low 70s (°F). No measureable rain was recorded.

## Additional Observations

Throughout the day, the biologist observed several birds, as listed in Table 1.

No monarch butterflies were observed today, but several butterflies and dragonflies were observed, including western tiger and black swallowtails and several cabbage white butterflies.

The California least tern that has been reported previously was not observed during the day's monitoring. **If the tern had approached work activities, all work would be stopped. Consistent with CDFW guidance from Betty Courtney on June 2, 2015 (personal communication via email to CDM Smith), "...everyone just needs to avoid the least tern so there is no direct mortality or capture, as defined by the code."**

The osprey that had been observed multiple times this week spent most of the morning perched in the large pine tree near the tide gates in the southwestern corner of the site.

The original active killdeer nest is now inactive as no eggs remain and the young have fledged. The two adults and one remaining fledgling show no site fidelity to the former nest site and forage for food throughout the Basin, particularly along north and west shorelines. Yesterday, a fledgling was found dead on the west bank, not related to project activities. Injuries suggest it was killed by a large bird, most likely an American crow. Crows have been harassing the killdeer relentlessly since the young fledged. A second fledgling, observed yesterday, was not observed today. Only one fledgling was

observed with the two adult killdeer today.

The two new active (i.e. containing eggs and/or nesting adults) nests discovered three days ago near the original, and now inactive, killdeer nest were observed throughout the day.

- **Killdeer Nest 2** – Approximately 8 feet to the southwest of the inactive killdeer nest is a second, active killdeer nest containing four eggs. For the fourth straight day, no adult was observed at the nest or within the vicinity of the nest. When approaching the nest, no adult exhibits typical nesting behaviors to lead the biologist away from the nest. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive.
- **Mourning Dove Nest** - Approximately 8 feet to the west of the inactive killdeer nest is an active mourning dove nest containing two eggs. The two eggs are located in a flimsy nest of twigs and grasses sitting on the ground amongst grasses and pickleweed. The adult was observed incubating the eggs the entire day and was never flushed.

Table 1 provides a list of bird species observed during biological monitoring on June 18, 2015.

<b>Table 1. Bird Species Observed during Biological Monitoring on June 18, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
Gadwall	<i>Anas strepera</i>	2 individuals foraging in Basin
Mallard	<i>Anas platyrhynchos</i>	12-14 individuals, including "eclipse" males resting/foraging throughout Basin
Snowy Egret	<i>Egretta thula</i>	6-7 individuals resting/foraging in Basin
Great Egret	<i>Ardea alba</i>	1 individual observed foraging throughout Basin
Great Blue Heron	<i>Ardea herodias</i>	1-2 individuals observed foraging in the Basin
Green Heron	<i>Butorides virescens</i>	1 individual observed in the southeast channel
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	5-6 adults and juveniles foraging in Basin
Double-crested Cormorant	<i>Phalacrocorax penicillatus</i>	1 individual observed flying over the Basin
Killdeer	<i>Charadrius vociferous</i>	2 adults and one offspring observed on north and west shores of Basin; A new active nest with 4 eggs discovered 8 feet southwest of inactive killdeer nest
Western Gull	<i>Larus occidentalis</i>	Very common; several flyovers of the Basin.
Anna's Hummingbird	<i>Calypte anna</i>	2-3 individuals observed along the north and east fences
Rock Pigeon	<i>Columba livia</i>	Several observed flying over Basin, particularly in western portion and around high-rises south of Admiralty Way
Mourning Dove	<i>Zenaida macroura</i>	Several observed, particularly on power lines in the northern portions of the basin; An active nest with incubating adult observed on ground 8 feet

		to the west of inactive killdeer nest – north shore on east side of northwest peninsula
Osprey	<i>Pandion haliaetus</i>	1 individual seen in the western Basin
American Crow	<i>Corvus brachyrhynchos</i>	Very common; several observed in vegetation, on utility poles, and flying over Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Several observed flying throughout the Basin
Barn Swallow	<i>Hirundo rustica</i>	Several observed flying throughout the Basin
Northern Mockingbird	<i>Mimus polyglottos</i>	2-3 individuals observed in the northern and eastern portions of the Basin
Black Phoebe	<i>Sayornis nigricans</i>	2-3 individuals foraging around Basin
House Finch	<i>Haemorhous mexicanus</i>	Very common; several observed in vegetation and on fences throughout the Basin
House Sparrow	<i>Passer domesticus</i>	Several observed along the north and east banks
Bushtit	<i>Psaltiriparus minimus</i>	1 individual seen along the bike path
Dark-eyed Junco	<i>Junco hyemalis</i>	3-4 individuals observed in trees along the bike path and at the pump house
European Starling	<i>Sturnus vulgaris</i>	Several observed perched on north fence or flying over site; primarily along Washington Blvd

## Conclusions

Biological monitoring was conducted on June 18, 2015, during minor vegetation removal by hand, installation of BMPs (silt fence and straw wattles), and temporary power installation activities at the site. Based on observations made during monitoring, the following conclusions were made:

1. Several bird species are present, foraging around the Basin. As the Basin transitions from a closed canopy to an open system, a larger number species that favor open, scrub habitats are being observed. The greatest songbird density is located near the bike path along the eastern fence of the site.
2. The original killdeer nest is now inactive, with two adults and one remaining fledgling foraging throughout the Basin and showing no site fidelity to the former nest site. Of the three fledglings, one was found dead yesterday on the west bank, not related to project activities, a likely American crow victim, and the other was not observed today. In addition to foraging on the north and west shorelines, the adults and remaining fledgling were observed foraging around the construction trailer and Parking Lot No. 8. While they are tolerant of human activities, the adults give an alarm call and shield the young if approached to within 15-20 feet of their location. The Biologist will continue to monitor the killdeer and the fledgling so that construction activities have no effect on them.
3. A second, active killdeer nest was discovered three days ago, approximately 8 feet southwest of the original killdeer nest site. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case,

incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active.

4. An active mourning dove nest was discovered approximately 8 feet west of the original killdeer nest site. The adult was observed incubating the two eggs throughout the day. The adult never left the nest, and did not flush when the biologist approached to check on the nest. Mourning doves are extremely tolerant of human activity, often nesting in gutters, lamp posts, and even construction equipment. Given the proximity of the nest to the original killdeer nest, it's assumed the eggs were laid June 13 or June 14. The eggs are incubated for two weeks, and the young are fledged after another two weeks. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active.
5. The Draft Nesting Bird Management Plan that was submitted to CDFW by CDM Smith, on behalf of the County on June 9, 2015, for the original killdeer nest. CDM Smith has contacted CDFW regarding the second active killdeer nest and the active mourning dove nest. Due to the close proximity of the two active nests to the original killdeer nest, the nest buffers for the first killdeer nest, as outlined in the Nesting Bird Management Plan, remain in place. They have been clearly flagged and all work activities are prohibited until the nests are no longer active. As construction activities progress, the biologist will continue to observe the nests for signs of disturbance during different stages of construction activities or noise and enforce appropriate buffer distances that prevent disturbance to the nesting killdeer and doves. Biologist observations and documented species tolerance may result in a smaller buffer around the mourning dove nest in order to remain in compliance with CDFW guidance and FG Code section 3503. Refer to Methods section of this document for more detail on CDFW guidance.
6. Wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
7. Significant algal cover was observed throughout the Basin. When water leaked in from the west tide gate, the biologist observed algae moving away from the gate, creating a small area of clear water until the flow ceased and the algae moved back in. Algal coverage is highest in the eastern Basin and often increases as the day goes on as the Basin is exposed to more sunlight.
8. Although the California least tern was not observed in the Basin today, it has been reported previously. CDFW recommends that avoidance is the best practice for avoiding take. As long as no activities result in direct mortality or capture, they can continue. To ensure no mortality or capture occurs, the biologist will temporarily stop work if the tern approaches work areas. In the unlikely event that the tern displays nesting behaviors, the biologist will stop work and CDFW will be contacted immediately.
9. The osprey was once again seen today in the Basin. It was perched in the large pine tree next to the tide gates when the biologist arrived on site in the morning. It would spend most of the next

Mr. Rick Sun  
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four hours perched in the top of the tree, with occasional flights where it would circle the Basin and return to the tree. The osprey appears rather disinterested in work activities.



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Matt Petty, CDM Smith*

*Date: June 19, 2015*

*Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on June 19, 2015. Monitoring is being conducted on a daily basis through completion of construction activities for the Oxford Retention Basin Multiuse Enhancement project. This monitoring is being conducted in compliance with the Streambed Alteration Agreement and Amendment issued by the California Department of Fish and Wildlife for the project.

## Methods

Biological monitoring was conducted by Matt Petty, CDM Smith biologist on June 19, 2015, beginning at 7:15 am and ending at 3:45 p.m. In accordance with the CDFW Streambed Alteration Agreement (Amendment 9, Section 2.32), the weather was checked to determine if rainfall in excess of the threshold (greater than 0.02 inch of rain, with 50% chance of rain or greater probability) was forecast. The forecast showed 0 percent chance of rain predicted for June 19, 2015. As stated in Amendment 9, "...if measurable rain...is predicted, all work activities shall cease and protective measures to prevent erosion/siltation shall be implemented/maintained."

**Per Betty Courtney, CDFW has reviewed the Draft Bird Nesting Management Plan. CDFW states, "...the buffer should be established based on observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503." The CDM Smith biologist followed CDFW guidance regarding observed behavior of the bird(s) during different stages of construction activities or noise to ensure the project meets the requirements of FG Code section 3503. Per Erinn Wilson on June 19, 2015, CDFW has no additional comments on the Draft Bird Nesting Management Plan and the Plan is now complete and Final.**

An inactive killdeer nest is present in the mudflat area on the north shore of the Basin. The three young have fledged and the fourth, abandoned egg is no longer at the nest site. The killdeer no longer show site fidelity to the former active nest and wander the entirety of the Basin, with most activity along the north and west banks. Vegetation removal and BMP installation was allowed approximately up to the 75- and 150-foot nesting buffers outlined in the Draft Bird Nesting

Management Plan. No mechanized equipment was used.

During the daily monitoring on June 19, 2015, the biologist observed minor vegetation removal by hand associated with BMP installation and installation of BMPs (silt fence and straw wattles) at the site. A crew of two workers conducted the vegetation removal and BMP installation, and were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field log notes, with observations of the day's activities and wildlife presence and behavior.

## **Biologist's Field Log**

7:15 am. The biologist arrived at Oxford Basin (site) and prepared and organized field equipment for initial biological survey. The contractor crew (superintendent + 2 crewmembers) are already on-site at the construction trailer preparing for the day's activities.

7:25 am. The biologist begins the initial biological survey. Four mallards fly off-site over the west fence, and one snowy egret is observed fishing at the tide gates. Four rock pigeons, two house finches, and one mourning dove are also perched near the tide gates. While hundreds of fish are located at the larger tide gate, no fish are observed near the smaller tide gate. Significant algae is observed on the smaller tide gate. One adult killdeer is present on the northwest mudflat, but no fledgling(s) is observed. The abandoned killdeer nest still contains four eggs, but remains vacant with no adults nearby. The mourning dove nest still contains two eggs, but is vacant, which is a departure from the last three days. Significant house finch and European starling activity is observed in palms along Washington Boulevard. Four mallards, two gadwall, one great blue heron, and one black-crowned night heron forage in the central Basin. Three house finches, one black phoebe, and two black-crowned night herons are present at the stormwater inlet. Wading birds are taking advantage of the low water levels, and can walk completely across the eastern Basin. Two barn swallows circle the eastern Basin, and eight American crows and two northern rough-winged swallows are observed along the southeast channel. One Anna's hummingbird, one mourning dove, three American crows, one house sparrow, two house finches, and one northern rough-winged swallow are observed along the bike path. Two dark-eyed juncos are heard calling in Yvonne Burke Park, and three rock pigeons perch on high-rises along Admiralty Way. A chipping sparrow and an adult killdeer forage along the south shore.

7:50 am. The biologist conducts Bio-awareness Training with the 3-person contractor crew. The biologist explained that no one should enter the nesting buffer areas, which are clearly flagged, and to adhere to BMPs to prevent soil erosion into the Basin. The contractor crew signed the sign-in sheet indicating they understood and will follow BMPs and wildlife protection measures. The superintendent explained that the planned activities for the day included installation of silt fence and straw wattles.

8:00 am. The contractor crew begins shoring up previously-installed silt fence along the southeast

channel and south bank. Two northern rough-winged swallows circle the eastern Basin, and one black phoebe is perched near the pump house. One barn swallow swoops in and out of the work area foraging on insects, and the biologist notifies the crew to be aware of the swallow. An American crow lands approximately 50-feet from the work area and walks atop straw wattles before finding food and flying over the bike path. A northern flicker is heard calling from Yvonne Burke Park.

8:30 am. The silt fence work along the southeast channel and south shore is completed. Several swallows are foraging above the eastern Basin, one dark-eyed junco is observed at the pump house, and two house finches and one northern mockingbird are perched on the east fence. Only three wading birds remain in the Basin – one great blue heron, one snowy egret, and one black-crowned night heron. This week, wading birds generally exit the site to the northwest prior to 10:00 am.

8:45 am. The contractor crew inspects the silt fence around the northeast peninsula, stormwater inlet, and east bank removing nearby debris that could cause future damage. Four mallards and one great blue heron foraging nearby are undisturbed. One Anna's hummingbird is observed in the northeast corner of the site.

9:00 am. Silt fence inspection is completed, and the contractor crew begins installing straw wattles along the west bank. Both killdeer adults are observed on the northwest mudflat, but no fledgling(s) are observed. The active mourning dove nest and abandoned killdeer nest are unoccupied. When crews open a plastic-encased spool of straw wattles, an adult house mouse (*Mus musculus*) and six young that were nesting in the wattles scatter about Parking Lot No. 8. The young take shelter in a clump of straw near the construction trailer and the adult shelters near the tractor. The biologist uses a trowel to carefully scoop up the shivering young and places them in a makeshift nest of straw roughly five feet downslope of the curb near the construction trailer. The biologist adds more straw to the makeshift nest to adequately warm and conceal the young mice. Given they have fur, can run, and their eyes are open, it is estimated the young are about two weeks old. A 10' x 10' buffer is established around the makeshift nest to protect it from accidental trampling.

9:30 am. Work resumes after crews break to allow the biologist to handle the house mouse issue. Work continues to consist of installing straw wattles along the west bank. Two mourning doves perch atop temporary power poles nearby, and three house finches are observed on the fence in the northwest corner of the site. American crows, house finches, rock pigeons, and western gulls frequently fly over the west bank.

10:00 am. Straw wattles installation along the west bank is completed. One osprey flies into the site and perches in the large pine tree next to the tide gates. A thick fog rolls in and shrouds the eastern Basin. It will eventually burn off around 12:30 pm.

10:30 am. The contractor crew begins clearing old chain-link fence from the west bank and clearing

vegetation with shovels in the northwest corner to prepare for silt fence installation. Two, gold-phase female house finches perch on top of a temporary power pole on the west bank, and two house sparrows fly about the brush near the northwest peninsula. Two northern rough-winged swallows circle the western Basin, and one snowy egret lands at the tide gates. The adult house mouse takes cover in a pile of silt fence near the construction trailer, roughly 10 feet from the makeshift nest containing the young mice.

11:00 am. Minor vegetation clearing continues along the north bank and proceeds along the northwest peninsula up to the 75-foot nesting buffer. As crews near the buffer, the biologist watches the nests. They remain unoccupied and no adults are observed nearby. Three house finches foraging along the northwest peninsula, and one adult and one fledgling killdeer on the north mudflat, are undisturbed. Six American crows perch on rooftops along Washington Blvd.

11:45 am. Vegetation clearing ends at the 75-foot nesting buffer. Silt fence installation begins on the west bank behind the construction trailer. The osprey leaves its perch and swoops down along the north mudflat. It is met midair by an adult killdeer, which forces it to land on a two foot wooden stake away from the fledgling. Both adult killdeer circle the osprey and call vociferously. A snowy egret lands at the tide gates, and one lesser goldfinch is observed on the tide gate roof. As it will be all day, both the abandoned killdeer nest and the active mourning dove nest are unoccupied.

12:00 pm. All construction crews and the biologist break for lunch. The osprey returns to its perch in the large pine tree near the tide gates with its talons empty.

1:00 pm. The construction crew resumes installing silt fence in the northwest corner of the site. The osprey remains perched in the large pine, and one snowy egret continues to fish at the tide gates. One double-crested cormorant swims about the western Basin, and three mallards forage in the central Basin. The abandoned killdeer nest remains unoccupied, as does the active mourning dove nest. However, two adult doves are observed foraging roughly 15-feet from the nest. Two killdeer adults and one fledgling forage on the northwest mudflat approximately 75 feet from the work area. The fledgling appears attracted by the silt fence installation, and the biologist shoos it away from work areas when it comes within 30 feet. One monarch flies into the work area, and the crew pauses to let it continue to the west. Several house finches fly over the work area.

1:20 pm. Silt fence installation ends at the 75-foot nesting buffer. Both the abandoned killdeer and active mourning dove nests remain unoccupied. A 6-8 inch long fish, the largest observed in the Basin this week, jumps in the western Basin, prompting the osprey to take flight. It circles the western Basin and hovers a few times but never dives. It perches atop a temporary power pole on the west bank for five minutes before returning to the large pine next to the tide gates.

1:45 pm. The crew begins shoring up the recently-installed silt fence. Four mallards and one double-crested cormorant forage in the central Basin. Two snowy egrets forage in the eastern Basin, and one forages at the tide gates. One killdeer adult and fledgling and one great egret forage

along the northwest mudflat. The osprey remains perched in the large pine at the tide gates.

2:45 pm. The work around the recently-installed silt fence ends along the northwest peninsula at the 75-foot nesting buffer. The crew returns to the west bank and begins moving previously-removed chain-link fence into a pile. Four house sparrows and two house finches forage along the north bank. Two American crows and one house finch perch atop palms along Washington Boulevard. Several American crows and house finches fly over the west bank. The abandoned killdeer nest and active dove nest remain unoccupied.

3:00 pm. The contractor crew begins minor vegetation removal with shovels along the west bank to prepare for future contaminated soil removal. One mallard flies over the work area. Western gull activity is also picking up, with eight observed flying over the marina and Hilton Garden Inn.

3:30 pm. All work stops for the day. The osprey leaves its perch and circles the entire Basin. It dives at two mallards, causing both to flee, but does not pursue them. It returns to the pine tree at the tide gates. One monarch flies into the work area on the west bank, and work momentarily stops to allow it to fly by. A great egret flies to the northwest mudflat, and two adult killdeer meet it in midair to force it to land away from the fledgling.

3:45 pm. Everyone leaves the site for the day.

Weather conditions during the day were mostly cloudy with thick fog in the morning with some sun in the afternoon. High temperatures were recorded in the low 70s (°F). No measureable rain was recorded.

## Additional Observations

Throughout the day, the biologist observed several birds, as listed in Table 1.

Two monarch butterflies were observed today; several other butterflies and dragonflies were also observed, including many cabbage white butterflies.

The California least tern that has been reported previously was not observed during the day's monitoring. **If the tern had approached work activities, all work would be stopped. Consistent with CDFW guidance from Betty Courtney on June 2, 2015 (personal communication via email to CDM Smith), "...everyone just needs to avoid the least tern so there is no direct mortality or capture, as defined by the code."**

The osprey that had been observed multiple times this week spent almost the entire day perched in the large pine tree near the tide gates in the southwestern corner of the site.

The original active killdeer nest is now inactive as no eggs remain and the young have fledged. The two adults and one remaining fledgling show no site fidelity to the former nest site and forage for food throughout the Basin, particularly along north and west shorelines. Earlier in the week, a fledgling was

found dead on the west bank, not due to project activities. Injuries suggest it was killed by a large bird, most likely an American crow. Crows have been harassing the killdeer relentlessly since the young fledged. The status of the second missing fledgling is unknown.

The two new nests discovered earlier in the week near the original, and now inactive, killdeer nest were observed throughout the day.

- **Killdeer Nest 2** – Approximately 8 feet to the southwest of the inactive killdeer nest is a second, active killdeer nest containing four eggs. Since it was found, no adult has been observed at the nest or within the vicinity of the nest, but the eggs remain in good condition. When approaching the nest, no adult exhibits typical nesting behaviors to lead the biologist away from the nest. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. If this is the case, incubation of the four eggs will not occur and the nest will be abandoned, rendering it inactive.
- **Mourning Dove Nest** - Approximately 8 feet to the west of the inactive killdeer nest is an active mourning dove nest containing two eggs. The two eggs are located in a flimsy nest of twigs and grasses sitting on the ground amongst grasses and pickleweed. Before today, the adult was observed incubating the eggs and was never flushed. Today, the nest was unoccupied all day, but the eggs remain in good condition.

**Per Erinn Wilson on June 19, 2015, CDFW instructs that the Final Bird Nesting Management Plan is a strategy document, not a log; therefore, it does not need to be updated with new information regarding the abandoned killdeer nest or the active mourning dove nest, both located roughly in the same location as the original killdeer nest described in the Plan.**

Table 1 provides a list of bird species observed during biological monitoring on June 19, 2015.

Table 1. Bird Species Observed during Biological Monitoring on June 19, 2015		
Common Name	Scientific Name	Comments
Gadwall	<i>Anas strepera</i>	2-4 individuals foraging in Basin
Mallard	<i>Anas platyrhynchos</i>	8-10 individuals, including "eclipse" males resting/foraging throughout Basin
Snowy Egret	<i>Egretta thula</i>	4-5 individuals resting/foraging in Basin
Great Egret	<i>Ardea alba</i>	1 individual observed foraging throughout Basin
Great Blue Heron	<i>Ardea herodias</i>	1-2 individuals observed foraging in the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	3-4 adults and juveniles foraging in Basin
Double-crested Cormorant	<i>Phalacrocorax penicillatus</i>	1 individual observed fishing throughout the Basin
Killdeer	<i>Charadrius vociferous</i>	2 adults and one offspring observed on north and west shores of Basin; A new active nest with 4 eggs discovered 8 feet southwest of inactive killdeer nest
Western Gull	<i>Larus occidentalis</i>	Very common; several flyovers of the Basin.

Anna's Hummingbird	<i>Calypte anna</i>	1-2 individuals observed along the north and east fences
Northern Flicker	<i>Colaptes auratus</i>	1 individual heard in Yvonne Burke Park
Rock Pigeon	<i>Columba livia</i>	Several observed flying over Basin, particularly in western portion and around high-rises south of Admiralty Way
Mourning Dove	<i>Zenaida macroura</i>	Several observed, particularly on power lines in the northern portions of the basin; An active nest observed on ground 8 feet to the west of inactive killdeer nest – north shore on east side of northwest peninsula
Osprey	<i>Pandion haliaetus</i>	1 individual seen in the western Basin
American Crow	<i>Corvus brachyrhynchos</i>	Very common; several observed in vegetation, on utility poles, and flying over Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Several observed flying throughout the Basin
Barn Swallow	<i>Hirundo rustica</i>	Several observed flying throughout the Basin
Northern Mockingbird	<i>Mimus polyglottos</i>	1-2 individuals observed in the northern and eastern portions of the Basin
Black Phoebe	<i>Sayornis nigricans</i>	2-3 individuals foraging around Basin
House Finch	<i>Haemorhous mexicanus</i>	Very common; several observed in vegetation and on fences throughout the Basin
House Sparrow	<i>Passer domesticus</i>	Several observed along the north and east banks
Chipping Sparrow	<i>Spizella passerina</i>	1 individual seen along the south shore
Lesser Goldfinch	<i>Spinus psaltria</i>	1 individual seen at the tide gates
Dark-eyed Junco	<i>Junco hyemalis</i>	2-3 individuals observed at the pump house and heard in Yvonne Burke Park
European Starling	<i>Sturnus vulgaris</i>	Several observed perched on north fence or flying over site; primarily along Washington Blvd

## Conclusions

Biological monitoring was conducted on June 19, 2015, during minor vegetation removal by hand and installation of BMPs (silt fence and straw wattles) at the site. Based on observations made during monitoring, the following conclusions were made:

1. Several bird species are present, foraging around the Basin. As the Basin transitions from a closed canopy to an open system, a larger number species that favor open, scrub habitats are being observed. The greatest songbird density is located near the bike path along the eastern fence of the site.
2. The original killdeer nest is now inactive, with two adults and one remaining fledgling foraging throughout the Basin and showing no site fidelity to the former nest site. Of the three fledglings, one was found dead on the west bank, not due to project activities, a likely American crow victim, and the status of the other missing fledgling is unknown. While they are tolerant of human activities, the adults give an alarm call and shield the young if approached to within 15-

20 feet of their location. The Biologist will continue to monitor the killdeer and the fledgling so that construction activities have no effect on them.

3. A second, killdeer nest was discovered four days ago approximately 8 feet southwest of the original killdeer nest site. Due to the proximity to the original nest, territoriality of killdeer, lack of adult presence, and the ability of killdeer to lay multiple clutches, it is believed that this second nest belongs to the mated pair with recently hatched chicks. To this point, incubation of the four eggs has not been observed, and the nest is abandoned, rendering it inactive. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it remains inactive.
4. An active mourning dove nest was discovered approximately 8 feet west of the original killdeer nest site. Up until today, the adult was observed incubating the two eggs throughout the day. Although the eggs are in good condition, the nest was unoccupied all day today. Mourning doves are extremely tolerant of human activity, often nesting in gutters, lamp posts, and even construction equipment. Given the proximity of the nest to the original killdeer nest, it's assumed the eggs were laid June 13 or June 14. The eggs are incubated for two weeks, and the young are fledged after another two weeks. The biologist will continue to maintain existing 75-foot (west) and 150-foot (east) nesting buffers, and will observe the nest to determine if it will remain active.
5. The Draft Nesting Bird Management Plan that was submitted to CDFW by CDM Smith, on behalf of the County on June 9, 2015, for the original killdeer nest does not need to be updated for the second killdeer nest and the active mourning dove nest (*per Erinn Wilson, CDFW, June 19, 2015*). Due to the close proximity of the two nests to the original killdeer nest, the nest buffers for the first killdeer nest, as outlined in the Nesting Bird Management Plan, remain in place. They have been clearly flagged and all work activities are prohibited until the nests are no longer active. As construction activities progress, the biologist will continue to observe the nests for signs of disturbance during different stages of construction activities or noise and enforce appropriate buffer distances that prevent disturbance to the nesting killdeer and doves. Biologist observations and documented species tolerance may result in a smaller buffer around the mourning dove nest in order to remain in compliance with CDFW guidance and FG Code section 3503. Refer to Methods section of this document for more detail on CDFW guidance.
6. Wildlife tend to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
7. Significant algal cover was observed throughout the Basin. When water leaked in from the west tide gate, the biologist observed algae moving away from the gate, creating a small area of clear water until the flow ceased and the algae moved back in. Algal coverage is highest in the eastern Basin and often increases as the day goes on as the Basin is exposed to more sunlight.
8. Although the California least tern was not observed in the Basin today, it has been reported previously. CDFW recommends that avoidance is the best practice for avoiding take. As long as

no activities result in direct mortality or capture, they can continue. To ensure no mortality or capture occurs, the biologist will temporarily stop work if the tern approaches work areas. In the unlikely event that the tern displays nesting behaviors, the biologist will stop work and CDFW will be contacted immediately.

9. The osprey was once again seen today in the Basin. From 10:00 am until everyone left the site at 3:45 pm, it was perched in the large pine tree next to the tide gates. Occasionally, it would circle the Basin or perch for a few minutes elsewhere, but would ultimately return to the tree. The osprey appears rather disinterested in work activities.